

TABLE 1—SCHEDULE FOR EXCEPTIONAL EVENT FLAGGING AND DOCUMENTATION SUBMISSION FOR DATA TO BE USED IN DESIGNATIONS DECISIONS FOR NEW OR REVISED NAAQS—Continued

NAAQS pollutant/ standard/(level)/ promulgation date	Air quality data collected for calendar year	Event flagging & initial description deadline	Detailed documentation submission deadline
Ozone/8-Hr Standard (0.075 ppm) Promulgated March 12, 2008.	2005–2007 .....	June 18, 2009 <sup>b</sup> .....	June 18, 2009. <sup>b</sup>
	2008 .....	June 18, 2009 <sup>b</sup> .....	June 18, 2009. <sup>b</sup>
	2009 .....	60 Days after the end of the calendar quarter in which the event occurred or Feb- ruary 5, 2010, whichever date occurs first. <sup>b</sup>	60 Days after the end of the calendar quarter in which the event occurred or Feb- ruary 5, 2010, whichever date occurs first. <sup>b</sup>

<sup>a</sup> These dates are unchanged from those published in the original rulemaking, and are shown in this table for informational purposes.

<sup>b</sup> Indicates change from general schedule in 40 CFR 50.14.

**Note:** EPA notes that the table of revised deadlines *only* applies to data EPA will use to establish the final initial designations for new or revised NAAQS. The general schedule applies for all other purposes, most notably, for data used by EPA for redesignations to attainment.

### (3) *Submission of demonstrations.*

(i) A State that has flagged data as being due to an exceptional event and is requesting exclusion of the affected measurement data shall, after notice and opportunity for public comment, submit a demonstration to justify data exclusion to EPA not later than the lesser of, 3 years following the end of the calendar quarter in which the flagged concentration was recorded or, 12 months prior to the date that a regulatory decision must be made by EPA. A State must submit the public comments it received along with its demonstration to EPA.

(ii) A State that flags data collected during calendar years 2004–2006, pursuant to paragraph (c)(2)(iv) of this section, must adopt the procedures and requirements specified in paragraph (c)(3)(i) of this section and must include a demonstration to justify the exclusion of the data not later than the submittal of the Governor's recommendation letter on nonattainment areas.

(iii) A State that flags Pb data collected during calendar years 2006–2009, pursuant to paragraph (c)(2)(v) of this section shall, after notice and opportunity for public comment, submit to EPA a demonstration to justify exclusion of the data not later than October 15, 2010. A State that flags Pb data collected during calendar year 2010 shall, after notice and opportunity for public comment, submit to EPA a demonstration to justify the exclusion of the data not later than May 1, 2011. A state

must submit the public comments it received along with its demonstration to EPA.

(iv) The demonstration to justify data exclusion shall provide evidence that:

(A) The event satisfies the criteria set forth in 40 CFR 50.1(j);

(B) There is a clear causal relationship between the measurement under consideration and the event that is claimed to have affected the air quality in the area;

(C) The event is associated with a measured concentration in excess of normal historical fluctuations, including background; and

(D) There would have been no exceedance or violation but for the event.

(v) With the submission of the demonstration, the State must document that the public comment process was followed.

[72 FR 13580, Mar. 22, 2007; 72 FR 28612, May 22, 2007; 73 FR 67051, Nov. 12, 2008; 74 FR 70598, Nov. 21, 2009; 74 FR 23312, May 19, 2009]

### § 50.15 National primary and secondary ambient air quality standards for ozone.

(a) The level of the national 8-hour primary and secondary ambient air quality standards for ozone (O<sub>3</sub>) is 0.075 parts per million (ppm), daily maximum 8-hour average, measured by a reference method based on appendix D to this part and designated in accordance with part 53 of this chapter or an equivalent method designated in accordance with part 53 of this chapter.

(b) The 8-hour primary and secondary O<sub>3</sub> ambient air quality standards are met at an ambient air quality monitoring site when the 3-year average of the annual fourth-highest daily maximum 8-hour average O<sub>3</sub> concentration is less than or equal to 0.075 ppm, as determined in accordance with appendix P to this part.

[73 FR 16511, Mar. 27, 2008]

**§ 50.16 National primary and secondary ambient air quality standards for lead.**

(a) The national primary and secondary ambient air quality standards for lead (Pb) and its compounds are 0.15 micrograms per cubic meter, arithmetic mean concentration over a 3-month period, measured in the ambient air as Pb either by:

(1) A reference method based on Appendix G of this part and designated in accordance with part 53 of this chapter or;

(2) An equivalent method designated in accordance with part 53 of this chapter.

(b) The national primary and secondary ambient air quality standards for Pb are met when the maximum arithmetic 3-month mean concentration for a 3-year period, as determined in accordance with Appendix R of this part, is less than or equal to 0.15 micrograms per cubic meter.

[73 FR 67052, Nov. 12, 2008]

**APPENDIX A TO PART 50—REFERENCE METHOD FOR THE DETERMINATION OF SULFUR DIOXIDE IN THE ATMOSPHERE (PARAROSANILINE METHOD)**

**1.0 Applicability.**

1.1 This method provides a measurement of the concentration of sulfur dioxide (SO<sub>2</sub>) in ambient air for determining compliance with the primary and secondary national ambient air quality standards for sulfur oxides (sulfur dioxide) as specified in § 50.4 and § 50.5 of this chapter. The method is applicable to the measurement of ambient SO<sub>2</sub> concentrations using sampling periods ranging from 30 minutes to 24 hours. Additional quality assurance procedures and guidance are provided in part 58, appendixes A and B, of this chapter and in references 1 and 2.

**2.0 Principle.**

2.1 A measured volume of air is bubbled through a solution of 0.04 M potassium tetrachloromercurate (TCM). The SO<sub>2</sub>

present in the air stream reacts with the TCM solution to form a stable monochlorosulfonatomercurate(3) complex. Once formed, this complex resists air oxidation(4, 5) and is stable in the presence of strong oxidants such as ozone and oxides of nitrogen. During subsequent analysis, the complex is reacted with acid-bleached pararosaniline dye and formaldehyde to form an intensely colored pararosaniline methyl sulfonic acid.(6) The optical density of this species is determined spectrophotometrically at 548 nm and is directly related to the amount of SO<sub>2</sub> collected. The total volume of air sampled, corrected to EPA reference conditions (25 °C, 760 mm Hg [101 kPa]), is determined from the measured flow rate and the sampling time. The concentration of SO<sub>2</sub> in the ambient air is computed and expressed in micrograms per standard cubic meter (µg/std m<sup>3</sup>).

**3.0 Range.**

3.1 The lower limit of detection of SO<sub>2</sub> in 10 mL of TCM is 0.75 µg (based on collaborative test results).(7) This represents a concentration of 25 µg SO<sub>2</sub>/m<sup>3</sup> (0.01 ppm) in an air sample of 30 standard liters (short-term sampling) and a concentration of 13 µg SO<sub>2</sub>/m<sup>3</sup> (0.005 ppm) in an air sample of 288 standard liters (long-term sampling). Concentrations less than 25 µg SO<sub>2</sub>/m<sup>3</sup> can be measured by sampling larger volumes of ambient air; however, the collection efficiency falls off rapidly at low concentrations.(8, 9) Beer's law is adhered to up to 34 µg of SO<sub>2</sub> in 25 mL of final solution. This upper limit of the analysis range represents a concentration of 1,130 µg SO<sub>2</sub>/m<sup>3</sup> (0.43 ppm) in an air sample of 30 standard liters and a concentration of 590 µg SO<sub>2</sub>/m<sup>3</sup> (0.23 ppm) in an air sample of 288 standard liters. Higher concentrations can be measured by collecting a smaller volume of air, by increasing the volume of absorbing solution, or by diluting a suitable portion of the collected sample with absorbing solution prior to analysis.

**4.0 Interferences.**

4.1 The effects of the principal potential interferences have been minimized or eliminated in the following manner: Nitrogen oxides by the addition of sulfamic acid,(10, 11) heavy metals by the addition of ethylenediamine tetracetic acid disodium salt (EDTA) and phosphoric acid,(10, 12) and ozone by time delay.(10) Up to 60 µg Fe (III), 22 µg V (V), 10 µg Cu (II), 10 µg Mn (II), and 10 µg Cr (III) in 10 mL absorbing reagent can be tolerated in the procedure.(10) No significant interference has been encountered with 2.3 µg NH<sub>3</sub>.(13)

**5.0 Precision and Accuracy.**

5.1 The precision of the analysis is 4.6 percent (at the 95 percent confidence level) based on the analysis of standard sulfite samples.(10)

5.2 Collaborative test results(14) based on the analysis of synthetic test atmospheres